SUBJECT INDEX FOR VOLUME 40, 1975

A

Abscesses, the prevention of liver
  Tylosin and chlortetracycline for, improved weight gains and feed efficiency in feedlot cattle, 207
Abstracts
  Southern Section, A.S.A.S., 167
Acrosomal maintenance and motility of a bull spermatozoa frozen in plastic straws
  Effect of glycerol equilibration time and thawing rate upon, 302
Adenine and riboflavin, effects of 5, 6-dimethylbenzimidazole
  On ruminal vitamin B_{12} synthesis, 1199
Age and calorie:protein ratio, effect of
  On performance and body composition of baby pigs, 1070
Alfalfa meal and alfalfa protein concentrate
  Utilization of, by rats, 500
Alfalfa meal, formaldehyde treated
  Digestion and utilization of, by sheep, 945
Alfalfa protein concentrate
  Utilization of alfalfa meal and, by rats, 500
  Utilization of, by swine, 885
Amino acid concentrations, tissue free
  Effect of dietary protein level on plasma and, in nursing lambs, 789
Amino acid limitations and amino acid substitution
  Condensed fermented corn solubles with germ meal and bran (DSLC) as a nutrient source for swine. I, II, 242, 247
Amino acids, abomasal
  And plasma nitrogen constituents in the bovine fed normal or *opaque-2* corn, 567
Ammonia levels, portal blood
  Influence of ammonium salts of volatile fatty acids upon, in lambs, 963
Ammonium lignin sulfonate, evaluation of
  As a non-protein nitrogen source for sheep, 1144
Ammonium salts of volatile fatty acids
  Influence of, upon portal blood ammonia levels in lambs, 963
Angus bulls, induced cryptorchids and steers
  Lipid comparison in, 1039
Animal nutrition research in Eastern Europe
  Recent developments in, 1284
Animal products
  Zero tolerance concept as it relates to hormonal residues in, 1258
Animal reproduction physiology and endocrinology
  Recent developments in, in Poland, 1307
Animal Science
  A systems analysis course for, 982
Animal Science research in Eastern Europe:
  An introduction to a symposium, 1281
Animal wastes, health aspects of recycling
  By feeding, 1263
Animals and agriculture, game
  The place of game animals in agriculture, 1020
Animals, the use of wild and domestic
  And the development of new genotypes. The place of game animals in agriculture, 1009
Antelope and livestock on rangelands
  The place of game animals in agriculture, 985
Anthelmintic activity of levamisole
  Against *ascaris, trichuris* and *metastrongylus* infection in swine, 838
Antibiotics in animal feeds
  Relationships of, and salmonellosis in animals and man, 1222
Antibiotics in feeds, economic importance of
  To producers and consumers of pork, beef and veal, 1241
Antimicrobials, dietary
  Effects of, during early growth and on subsequent swine performance, 655
Artificial insemination, effect of clitorial massage after
  On conception in the bovine, 1119
Ascaris, trichuris and *metastrongylus* infection in swine
  Anthelmintic activity of levamisole against, 838
Award for Excellence in Research, Teaching and Extension
  Midwestern Section A.S.A.S. Younger Scientist (Award), 580
Awasi sheep fed different levels of roughage
  Effect of high ambient temperature and low humidity on nutrient utilization and on some physiological responses in, 320

B

Barley, influence of whole-plant
  Reconstituted with sodium hydroxide on digestibility, rumen fluid and plasma metabolism of sheep, 351
Beef carcass composition
  Marbling: Its use in predicting, 235
Beef cattle
  Comparison of supplements containing soybean meal and urea fed with whole or ground shelled corn to, 1
  Depletion patterns of radioactivity and tissue residues in, after the withdrawal of oral 14 C-diethystilbestrol, 539
Beef cattle, finishing
  For slaughter on all-forage diets, 1034
Beef cattle performance
  Effect of drinking water temperature on, 223

SUBJECT INDEX FOR VOLUME 40, 1975

A

Abscesses, the prevention of liver
  Tylosin and chlortetracycline for, improved weight gains and feed efficiency in feedlot cattle, 207
Abstracts
  Southern Section, A.S.A.S., 167
Acrosomal maintenance and motility of a bull spermatozoa frozen in plastic straws
  Effect of glycerol equilibration time and thawing rate upon, 302
Adenine and riboflavin, effects of 5, 6-dimethylbenzimidazole
  On ruminal vitamin B_{12} synthesis, 1199
Age and calorie:protein ratio, effect of
  On performance and body composition of baby pigs, 1070
Alfalfa meal and alfalfa protein concentrate
  Utilization of, by rats, 500
Alfalfa meal, formaldehyde treated
  Digestion and utilization of, by sheep, 945
Alfalfa protein concentrate
  Utilization of alfalfa meal and, by rats, 500
  Utilization of, by swine, 885
Amino acid concentrations, tissue free
  Effect of dietary protein level on plasma and, in nursing lambs, 789
Amino acid limitations and amino acid substitution
  Condensed fermented corn solubles with germ meal and bran (DSLC) as a nutrient source for swine. I, II, 242, 247
Amino acids, abomasal
  And plasma nitrogen constituents in the bovine fed normal or *opaque-2* corn, 567
Ammonia levels, portal blood
  Influence of ammonium salts of volatile fatty acids upon, in lambs, 963
Ammonium lignin sulfonate, evaluation of
  As a non-protein nitrogen source for sheep, 1144
Ammonium salts of volatile fatty acids
  Influence of, upon portal blood ammonia levels in lambs, 963
Angus bulls, induced cryptorchids and steers
  Lipid comparison in, 1039
Animal nutrition research in Eastern Europe
  Recent developments in, 1284
Animal products
  Zero tolerance concept as it relates to hormonal residues in, 1258
Animal reproduction physiology and endocrinology
  Recent developments in, in Poland, 1307
Animal Science
  A systems analysis course for, 982
Animal Science research in Eastern Europe:
  An introduction to a symposium, 1281
Animal wastes, health aspects of recycling
  By feeding, 1263
Animals and agriculture, game
  The place of game animals in agriculture, 1020
Animals, the use of wild and domestic
  And the development of new genotypes. The place of game animals in agriculture, 1009
Antelope and livestock on rangelands
  The place of game animals in agriculture, 985
Anthelmintic activity of levamisole
  Against *ascaris, trichuris* and *metastrongylus* infection in swine, 838
Antibiotics in animal feeds
  Relationships of, and salmonellosis in animals and man, 1222
Antibiotics in feeds, economic importance of
  To producers and consumers of pork, beef and veal, 1241
Antimicrobials, dietary
  Effects of, during early growth and on subsequent swine performance, 655
Artificial insemination, effect of clitorial massage after
  On conception in the bovine, 1119
Ascaris, trichuris and *metastrongylus* infection in swine
  Anthelmintic activity of levamisole against, 838
Award for Excellence in Research, Teaching and Extension
  Midwestern Section A.S.A.S. Younger Scientist (Award), 580
Awasi sheep fed different levels of roughage
  Effect of high ambient temperature and low humidity on nutrient utilization and on some physiological responses in, 320

B

Barley, influence of whole-plant
  Reconstituted with sodium hydroxide on digestibility, rumen fluid and plasma metabolism of sheep, 351
Beef carcass composition
  Marbling: Its use in predicting, 235
Beef cattle
  Comparison of supplements containing soybean meal and urea fed with whole or ground shelled corn to, 1
  Depletion patterns of radioactivity and tissue residues in, after the withdrawal of oral 14 C-diethystilbestrol, 539
Beef cattle, finishing
  For slaughter on all-forage diets, 1034
Beef cattle performance
  Effect of drinking water temperature on, 223

Beef heifers, puberty in
I. The interrelationship between pituitary, hypothalamic and ovarian hormones, 1091
II. Effect of injections of progesterone and estradiol-17B on serum LH, FSH and ovarian activity, 1105
III. Induction of fertile estrus, 1110
Beef production
Caloric efficiency of, 561
Beef steers implanted with ^{14}C-diethylstilbestrol
Fate of radiocarbon in, 550
Biuret, feed grade
As a protein replacement for ruminants. A review, 1150
Biuret, molasses and dehydrated alfalfa, dietary levels of
Biuretolytic activity of rumen microorganisms as influenced by, 126
Biuretolytic activity of rumen microorganisms
As influenced by dietary levels of biuret, molasses and dehydrated alfalfa, 126
Blood parameters and tissue lipids
Growth, of finishing cattle fed a formaldehyde treated casein-safflower oil complex, 358
Boar spermatozoa, freezing of:
Fertilizing capacity with concentrated semen and a new thawing procedure, 99
Boars and gilts, growth and bone development in
Influence of dietary phosphorus level on, 864
Boars, effect of age of
On testicular lipids and fatty acids, 108
Breed, effect of
And time on feed on the size and distribution of beef muscle fiber types, 613
Broiler litter, ensiled
And corn forage. I. Fermentation characteristics, 144
II. Digestibility, nitrogen utilization and palatability by sheep, 156
Bulls, Angus
Lipid comparison in, induced cryptorchids and steers, 1039
Bulls, electroejaculation of
Using pulse waves of variable frequency and length, 665
Bulls, pubertal and prepubertal
Serum luteinizing hormone, testosterone and androstenedione in, after gonadotropin releasing hormone, 682
"B"-vitamin deficiency of sheep, suspected
Fed a protein-free urea containing purified diet, 1192

C

^{14}C-diethylstilbestrol
Fate of radiocarbon in beef steers implanted with, 550
^{14}C-diethylstilbestrol, oral
Depletion patterns of radioactivity and tissue residues in beef cattle after the withdrawal of, 539
Calcium and phosphorus levels, effect of
On growth, reproduction and bone development of ponies, 78
Calcium hydroxide
Effect of ferrous sulfate and, in reducing gossypol toxicity, 640
Calcium level, dietary
Influence of steam pelleting and, on the utilization of phosphorus by the pig, 857
Calves, Brahman-Shorthorn
Heterosis effects on weaning performance of, 826
Calves fed a high but nontoxic zinc level
Zinc metabolic adaptations in, for varying time periods, 132
Calves, Holstein
^{203}Hg excretion and tissue distribution in, following single tracer intravenous doses of methyl mercury chloride of mercuric chloride, 720
Carbon, activated
Tissue residues, performance and ruminal and blood characteristics of steers fed ronnel and, 743
Carcasses, beef
Variability in microbiological counts on, 834
Carcasses, chemical composition of
From Hereford, Limousin and Simmental crossbred cattle as related to growth and meat palatability, 463
Carcinogens and hormones, effects of chemical
Comparison of the tumorigenic, 1263
Casein-safflower oil complex
Growth, blood parameters and tissue lipids of finishing cattle fed a formaldehyde treated, 358
Cattle
Twinning in, 803
Cattle and sheep
Wind-chill effect for, 161
Cattle, beef
Feeding value of whole and rolled propionic acid-treated high-moisture corn for, 706
Lipogenesis and lipolysis in adipose tissue of *ad libitum* and restricted-fed, during growth, 957
Cattle, feedlot
Micronized sorghum grain. III. Energetic efficiency for, 936
Tylosin and chlortetracycline for the prevention of liver abscesses, improved weight gains and feed efficiency in, 207
Cattle, fertility of
Effect of heterospermic insemination on, 1124
Cattle, finishing
Growth, blood parameters and tissue lipids of, fed a formaldehyde treated casein-safflower oil complex, 358
Cattle, growing-finishing beef
Comparative nutritive value of raw, roasted, ensiled high-moisture and pressure flaked corn for, 1214
Cattle, Hereford, Limousin and Simmental crossbred
Chemical composition of carcasses from, as related to growth and meat palatability, 463
Cattle, induction of parturition in dairy
With dexamethasone and estradiol benzoate, 261
Cattle, purebred and crossbred
Sire effects for specific combining ability in, 230
Cattle, Red Danish

Genetic analysis of the serum level of IgG_2 and total protein in, 392
Cellular growth of skeletal muscle in swine
Differing in muscularity, 476
Charolais bulls, puberal traits of
Growth and feed efficiency and their relationship to, 288
Chloride, methyl mercury or mercuric
^{203}Hg excretion and tissue distribution in Holstein calves following single tracer intravenous doses of, 720
Chlortetracycline, tylosin and
For the prevention of liver abscesses, improved weight gains and feed efficiency in feedlot cattle, 207
Clitoral massage, effect of
After artificial insemination on conception in the bovine, 1119
Collection technique
And progesterone concentration of ovarian and uterine venous blood in mares, 275
Computer simulation of iodine metabolism
By mammals, 342
Conception in the bovine
Effect of clitoral massage after artificial insemination on, 1119
Confinement, an evaluation of enclosed
And drylot finishing systems for swine, 214
Consumers of pork, beef and veal
Economic importance of antibiotics in feeds to producers and, 1241
Copper uptake by swine
Effects of source on, 880
Corn and mixed feed
Vitamin E stability in, 495
Corn and oats, energy values of
For young swine, 1052
Corn for beef cattle
Feeding value of whole and rolled propionic acid-treated high-moisture, 706
Corn forage
Ensiled broiler litter and, I. Fermentation characteristics, 144
II. Digestibility, nitrogen utilization and palatability by sheep, 156
Corn, normal or *opaque-2*
Abomasal amino acids and plasma nitrogen constituents in the bovine fed, 567
Corn, raw, roasted, ensiled high-moisture and pressure flaked
Comparative nutritive value of, for growing-finishing beef cattle, 1214
Corn solubles, condensed formented
With germ meal and bran (DSLC) as a nutrient for swine. I. Amino acid limitations, 242
II. Amino acid substitution, 247
Corn, whole or ground shelled
Comparison of supplements containing soybean meal and urea fed with, to beef cattle, 1
Corn, various physical forms of
Comparison of cattle finishing diets containing, 952
Corns, chemically preserved high-moisture
In diets for growing-finishing swine, 1063
Corpora lutea, regression of
Prevention of estrogen-induced, in ewes by hysterectomy, 687
Cottonseed, unextracted
In diets for monogastric animals. I. The effect of ferrous sulfate and calcium hydroxide in reducing gossypol toxicity, 640
II. The effect of boiling and oven *vs* sun drying following pretreatment with a ferrous sulfate solution, 648
Course for Animal Science
A Systems Analysis, 982
Cow size and herd management
Systems analysis of sources of genetic and environmental variation in efficiency of beef production:, 409
Creatine phosphokinase activity in swine
Variation of plasma, 75
Crossfostering, systematic
Within control lines, 70
Cryptorchids, induced
Lipid comparison in Angus bulls, and steers, 1039

D

Dam productivity
Maternal heterosis in swine: Reproductive performance and, 29
Decapitation, effects of fetal
On fetal development, parturition and lactation in pigs, 282
Dexamethasone and estradiol benzoate
Induction of parturition in dairy cattle with, 261
Diets, comparison of cattle finishing
Containing various physical forms of corn, 952
Diet, influence of
On passage rate and apparent digestibility by growing swine, 486
Dietary levels of biuret, molasses and dehydrated alfalfa
Biuretolytic activity of rumen microorganisms as influenced by, 126
Dietary restriction and fasting, effects of
On the body composition of normal and genetically obese mice, 1058
Dietary sodium levels, effect of
On blood levels, urinary excretion and adrenal histology of lambs, 1205
Diethylstilbestrol, metabolic fate of
Implanted in the ear of steers, 530
Diets, all forage
Finishing beef cattle for slaughter on, 1034
Digestibility, apparent
Influence of diet on passage rate and by growing swine, 486
5,6-dimethylbenzimidazole, effects of
Adenine and riboflavin on ruminal vitamin B_{12} synthesis, 1192
Distillers feeds, influence of
On digestion in the equine, 1086
Drylot finishing systems for swine
An evaluation of enclosed confinement and, 214
Dry matter digestibility in ruminants

Relationship between nitrogen balance, digested nitrogen and, 366

E

Efficiency, caloric
Of beef production, 561
Ejaculation, effect of frequency of
On seminal characteristics and spermatozoal output. Reproductive physiology of the stallion. V., 917
Electroejaculation of bulls
Using pulse waves of variable frequency and length, 665
Embryos, rabbit
Development of, after storage at 10 C, 900
Energy metabolism in the young pig
Effect of level of intake and diet dilution on, 1045
Equine digestion in the
Influence of distillers feeds on, 1086
Estradiol benzoate, dexamethasone and
Induction of parturition in dairy cattle with, 261
Estradiol benzoate treated heifers
Plasma hormone levels in 6-methyl-17-acetoxy-progesterone and, 671
Estrogen and L-dihydroxyphenlalanine induced changes
In hypothalamic biogenic amine levels and serum LH in the ewe, 1185
Estrogen-induced regression of corpora lutea
Prevention of, in ewes by hysterectomy, 687
Estrous cycle, effects of prostaglandin $F_{2\alpha}$
Or corpus luteum in mares and gilts, 518
Estrous cycle length in swine
Effect of surgical separation of uterus and ovaries on, 905
Estrus, Induction of fertile
Puberty in beef heifers. III., 1110
Europe, animal nutrition research in Eastern
Recent developments in, 1284
Ewe, serum LH in the
Estrogen and L-dihydroxyphenylalanine induced changes, in hypothalamic biogenic amine levels and, 1185
Ewes
Prevention of estrogen-induced regression of corpora lutea in, by hysterectomy, 687
Ewes, lamb production
Breed and age effects on, 397
Ewes, normal
Renal response to vasopressin infusion in vitamin A-deficient and, 103
Exercise, influence of
On performance and carcass parameters of confinement reared swine, 457

F

Fat, effect of
On performance of baby and growing pigs, 1081
Fatty acid production, gas and volatile
At different rates of rumen microbial protein synthesis *in vitro*, 374
Fatty acids
Effect of age of boars on testicular lipids and, 108
Fatty acids, influence of branched-chain volatile
On nitrogen utilization by lambs fed urea containing high roughage rations, 523
Feed restriction
Performance, digestibility and ^{40}K levels in lambs during compensation for, 138
Feed, time on
Effect of breed and, on the size and distribution of beef muscle fiber types, 613
Feedlot performance of cattle, influence on
Micronized sorghum grain. I., 924
Fermentation characteristics
Ensiled broiler litter and corn forage. I., 144
Ferrous sulfate and calcium hydroxide, effect of
In reducing gossypol toxicity, 640
Ferrous sulfate solution
The effect of boiling and oven *vs* sun drying following pretreatment with a, 648
Fertility of cattle
Effect of heterospermic insemination on, 1124
Fertility, equine
Effect of seminal extenders on, 1136
Follicular fluid, bovine
Porcine spermatozoan respiration and motility in the presence of, 96
Formaldehyde treated casein-safflower oil complex
Growth, blood parameters and tissue lipids of finishing cattle fed a, 358

G

Game animals and agriculture
The place of game animals in agriculture, 1020
Game animals in agriculture, the place of
Antelope and livestock on rangelands, 985
Commercial uses of game animals on rangelands of Texas, 1000
International game ranching programs, 993
Potential of wildlife as a protein source, 1016
The place of game animals in agriculture: Game animals and agriculture, 1020
The use of wild and domestic animals and the development of new genotypes, 1009
Game animals on rangelands of Texas, commercial uses of
The place of game animals in agriculture, 1000
Game ranching programs, international
The place of game animals in agriculture, 993
Gas and volatile fatty acid production
At different rates of rumen microbial protein synthesis *in vitro*, 374
Genetic and environmental effects and interactions
In swine growth and feed utilization, 53
Genetic parameters, realized
From index selection in mice, 38
Genetics of reproduction
In domesticated rainbow trout, 19
Genotypes, new
The use of wild and domestic animals and the development of,
The place of game animals in agriculture, 1009
Germ meal and bran (DSLC), condensed fermented

corn solubles with
As a nutrient source for swine. I. Amino acid limitations, 242
II. Amino acid substitution, 247
Glutamic acid
And tryptophan additions to a low-protein pig starter, 871
Glycerol equilibration time and thawing rate, effect of
Upon acrosomal maintenance and motility of bull spermatozoa frozen in plastic straws, 302
Glycolysis, post-mortem
Effect of pituitary gland activity on *longissimus* muscle, in the pig, 604
Goats, growing and mature
Thyroid hormone secretion rates in, 1130
Gonadotropin releasing hormone
Serum luteinizing hormone, testosterone and androstenedione in pubertal and prepubertal bulls after, 682
Gossypol toxicity
The effect of ferrous sulfate and calcium hydroxide in reducing, 640
Grasses, effect of three pasture
On yearling pony weight gains and pasture carrying capacity, 86
Growth and feed efficiency
And their relationship to puberal traits of Charolais bulls, 288
Growth and meat palatability
Chemical composition of carcasses from Hereford, Limousin and Simmental crossbred cattle as related to, 463
Growth and plasma amino acids of steers
Fed different nitrogen sources at restricted intake, 714
Growth, blood parameters and tissue lipids of finishing cattle
Fed a formaldehyde treated casein-safflower oil complex, 358
Growth promotants, effect of currently-used
Upon skeletal maturation of beef steers, 1211
Growth rate, preweaning
Relationship between, of female lambs and the growth of their offspring, 585

H

Hays, pangola digitgrass
Effect of maturity and protein supplementation on voluntary intake and nutrient digestibility of, 769
Health aspects of recycling animal wastes
By feeding, 1263
Heat load and supplement effects
On performance and nutrient utilization by lambs fed orchard-grass hay, 313
Heifers
Plasma hormone levels in 6-methyl-17-acetoxy-progesterone and estradiol benzoate treated, 671
Heifers and lambs, growing beef
Milo stover and sources of supplemental nitrogen for, 306
Hereford, Hereford x Holstein and Holstein cows
Performance of 3-year-old, on range and in drylot, 114
Heterosis and complementarity
Systems analysis of sources of genetic and environmental variation in efficiency of beef production:, 421
Heterosis effects
On weaning performance of Brahman-Shorthorn calves, 826
Heterosis in swine, maternal:
Reproductive performance and dam productivity, 29
Hormonal residues in animal products
Zero tolerance concept as it relates to, 1258
Hormone, growth
Somastostatin: Its influence on plasma levels of, prolactin and thyrotropin in sheep, 911
Hormones, pituitary, hypothalamic and ovarian
Puberty in beef heifers. I. The interrelationship between, 1091
Hypothalamic biogenic amine levels
Estrogen and L-dihydroxyphenylalanine induced changes in, and serum LH in the ewe, 1185
Hysterectomy
Prevention of estrogen-induced regression of corpora lutea in ewes by, 687

I

IgG_2, the serum level of
Genetic analysis of, and total protein in Red Danish cattle, 392
Incubation, oviduct
Alteration of phospholipids in porcine spermatozoa during *in vivo* uterus and, 269
Index selection
Based on the nursing ability of the mother and the mature weight of the offspring in mice, 590
Index selection in mice
Realized genetic parameters from, 38
Insemination, effect of heterospermic
On fertility of cattle, 1124
Intake and diet dilution, effect of level of
On energy metabolism in the young pig, 1045
Iodine metabolism
Computer simulation of, by mammals, 342
Iron, supplemental
For the artificially reared piglet, 621

L

Lambs
Cellular changes in the tissues of, during fetal growth, 783
Effect of dietary sodium levels on blood levels, urinary excretion and adrenal histology of, 1205
Milo stover and sources of supplemental nitrogen for growing beef heifers and, 306
Salt requirements of, 329
Lambs fed added perloline
Nutrient digestibility and metabolism in, 972
Lambs fed orchard-grass hay
Heat load and supplement effects on performance

and nutrient utilization by, 313
Lambs fed urea containing high roughage rations
Influence of branched-chain volatile fatty acids on nitrogen utilization by, 523
Lambs, female
Relationship between preweaning growth rate of, and the growth of their offspring, 585
Lambs, ^{40}K levels in
Performance, digestibility and, during compensation for feed restriction, 138
Lambs, nursing
Effect of dietary protein level on plasma and tissue free amino acid concentrations in, 789
Lambs, portal blood ammonia levels in
Influence of ammonium salts of volatile fatty acids upon, 963
Lamb production of ewes
Breed and age effects on, 397
Lamb weight, 90-day
Adjustment factors for, 383
Learning, avoidance and maze
In pigs, 573
Levamisole, anthelmintic activity of
Against *ascaris, trichuris* and *metastrongylus* in swine, 838
Lipid comparison
In Angus bulls, induced cryptorchids and steers, 1039
Lipids, testicular
Effect of age of boars on, and fatty acids, 108
Lipogenesis and lipolysis in adipose tissue
Of *ad libitum* and restricted-fed beef cattle during growth, 957
Lipolysis, lipogenesis and
In adipose tissue of *ad libitum* and restricted-fed beef cattle during growth, 957
L-lysine supplementation
Effect of processing temperature and, on utilization of sunflower meal by the growing rat, 90
Lysine requirement of growing pigs
At two levels of dietary protein, 851

M

Magnesium supplementation
Space and docking effects on swine performance and behavior, 1027
Malathion, effects of methoxychlor and
On semen characteristics of rams, 514
Mammals
Computer simulation of iodine metabolism by, 342
Marbling:
Its use in predicting beef carcass composition, 235
Mares
Collection technique and progesterone concentration of ovarian and uterine venous blood in, 275
Plasma protestins in pregnant, postpartum and cycling, 251
Mares and gilts, corpus luteum in
Effects of prostaglandin $F_{2\alpha}$ on estrous cycle or, 518
Maternal ability in laboratory mice
Characterization of response to selection for growth and, 48
Mating plans
Systems analysis of sources of genetic and environmental variation in efficiency of beef production:, 433
Maturation, sexual
Influence of the male's presence on, growth and feed efficiency of female mice, 816
Meat palatability
Chemical composition of carcasses from Hereford, Limousin and Simmental crossbred cattle as related to growth and, 463
Memorials, 795
Methoxychlor and malathion, effects of
On semen characteristics of rams, 514
6-methyl-17-acetoxyprogesterone, plasma hormone levels in
And estradiol benzoate treated heifers, 671
Methyl mercury chloride or mercuric chloride
^{203}Hg excretion and tissue distribution in Holstein calves following single tracer intravenous doses of, 720
Mice
Selection index based on the nursing ability of the mother and the mature weight of the offspring in, 590
Mice, female
Influence of the male's presence on sexual maturation, growth and feed efficiency of, 816
Mice, index selection in
Realized genetic parameters from, 38
Mice, laboratory
Characterization of response to selection for growth and maternal ability in, 48
Mice, normal and genetically obese
Effects of dietary restriction and fasting on the body composition of, 1058
Microbial protein synthesis *in vitro*, rumen
Gas and volatile fatty acid production at different rates of, 374
Microbiological counts, variability in
On beef carcasses, 834
Microorganisms, rumen
Biuretolytic activity of, as influenced by dietary levels of biuret, molasses and dehydrated alfalfa, 126
Milo stover and sources of supplemental nitrogen
For growing beef heifers and lambs, 306
Molasses, cane
Effects of feeding graded levels of, on the performance and carcass characteristics and organ weights of Yorkshire pigs in a tropical environment, 632
Molybdenum and sulfate, effect of high dietary
On plasma copper clearance and tissue minerals in growing swine, 509
Monogastric animals
Unextracted cottonseed in diets for,: I. The effect of ferrous sulfate and calcium hydroxide in reducing gossypol toxicity, 640
II. The effect of boiling and oven *vs* sun drying following pretreatment with a ferrous sulfate solution, 648
Muscle biopsies, histochemical relationships of

With bovine muscle quality and composition, 451
Muscle fiber types, beef
Effect of breed and time on feed on the size and distribution of, 613
Muscle processing characteristics
Comparison of a lean and fat line of swine for, 598
Muscle quality and composition, bovine
Histochemical relationships of muscle biopsies with, 451
Muscle quality in six breeds of swine
Antemortem detection of, 444

N

Net income estimates
A multiple regression model for, from 100-sow production units, 6
News and Notes 206, 381, 583, 801, 1025, 1319
Nitrogen, abomasal
Nitrogen metabolism in the bovine: Adjustment to nitrogen source as reflected by changes in, and plasma components, 775
Nitrogen balance, relationship between
Digested nitrogen and dry matter digestibility in ruminants,,366
Nitrogen components of broiler litter
Effect of processing method on pasturization and, and on nitrogen utilization by sheep, 750
Nitrogen metabolism in the bovine:
Adjustment to nitrogen source as reflected by changes in abomasal nitrogen and plasma components, 775
Nitrogen source, adjustment to
Nitrogen metabolism in the bovine: As reflected by changes in abomasal nitrogen and plasma components, 775
Nitrogen source for sheep, non-protein
Evaluation of ammonium lignin sulfonate as a, 1144
Nitrogen sources, different
Growth and plasma amino acids of steers fed, at restricted intake, 714
Nitrogen, supplemental
Milo stover and sources of, for growing beef heifers and lambs, 306
Nitrogen utilization by lambs
Influence of branched-chain volatile fatty acids on, fed urea containing high roughage rations, 523
Nutrient digestibility and metabolism in lambs
Fed added perloline, 972
Nutrient utilization
Effect of high ambient temperature and low humidity on, and on some physiological responses in Awasi sheep fed different levels of roughage, 320
Nutrient utilization by lambs fed orchard-grass hay
Heat load and supplement effects on performance and, 313

O

Oats for young swine
Energy values of corn and, 1052
Ovulation rate in swine, selection for:
Population, procedures and ovulation response, 61

P

Pangolagrass and water hyacinth silages
Comparison of, as diets for sheep, 968
Parameters, performance and carcass
Influence of exercise on, of confinement reared swine, 457
Parturition in dairy cattle, induction of
With dexamethasone and estradiol benzoate, 261
Passage rate and apparent digestibility
Influence of diet on, by growing swine, 486
Performance, beef cattle
Effect of drinking water temperature on, 223
Performance on range and in drylot
Of 3-year-old Hereford, Hereford × Holstein and Holstein cows, 114
Perloline
Nutrient digestibility and metabolism in lambs fed added, 972
Phospholipids in porcine spermatozoa, alteration of,
During *in vivo* uterus and oviduct incubation, 269
Phosphorus level, influence of dietary
On growth and bone development in boars and gilts, 864
Phosphorus levels, effect of calcium and
On growth, reproduction and bone development of ponies, 78
Phosphorus requirements of sows
During gestation and lactation, 660
Phosphorus, the utilization of
Influence of steam pelleting and dietary calcium level on, by the pig, 857
Phosphorus, utilization of
From different supplements for growing-finishing beef steers, 760
Pig
Effect of pituitary gland activity on *longissimus* muscle post-mortem glycolysis in the, 604
Pig performance, baby
Effect of weaning and age at weaning on, 1077
Pig starter, a low-protein
Glutamic acid and tryptophan additions to, 871
Pig starters, semipractical
Tryptophan requirements of 5-to 15-kg pigs with, 875
Pig, the utilization of phosphorus by the
Influence of steam pelleting and dietary calcium level on, 857
Pig, the young
Effect of level of intake and diet dilution on energy metabolism in, 1045
Piglet, the artificially reared
Supplemental iron for, 621
Pigs
Avoidance and maze learning in, 573
Effects of fetal decapitation on fetal development, parturition and lactation in, 282
Pigs, baby
Effect of age and calorie:protein ratio on performance and body composition of, 1070
Pigs, baby and growing

Effect of fat on performance of, 1081
Pigs, 5- to 15-kg
Tryptophan requirements of, with semipractical pig starters, 875
Pigs, growing
Lysine requirement of, at two levels of dietary protein, 851
Pigs, Yorkshire
Effects of feeding graded levels of cane molasses on the performance and carcass characteristics and organ weights of, in a tropical environment, 632
Pituitary gland activity, effect of
On *longissimus* muscle post-mortem glycolysis in the pig, 604
Placement, 205, 380, 582, 798, 1025, 1316
Plasma amino acids of steers
Growth and, fed different nitrogen sources at restricted intake, 714
Plasma copper clearance and tissue minerals
Effect of high dietary molybdenum and sulfate on, in growing swine, 509
Plasma hormone levels
In 6-methyl-17-acetoxyprogesterone and estradiol benzoate treated heifers, 671
Plasma levels of growth hormone, prolactin and thyrotropin in sheep
Somatostatin: Its influence on, 911
Plasma progestins
In pregnant, postpartum and cycling mares, 251
Plasma nitrogen
Abomasal amino acids and, constituents in the bovine fed normal or *opaque-2* corn, 567
Poland,
Recent developments in animal reproduction physiology and endocrinology in, 1307
Ponies,
Effect of calcium and phosphorus levels on growth, reproduction and bone development of, 78
Pony weight gains, yearling
Effect of three pasture grasses on, and pasture carrying capacity, 86
Poplar bark
Effects of grinding and sodium hydroxide treatment on, 727
Poplar bark, chemically treated
In vitro evaluation of, 727
Pregnancy in sows, early diagnosis of
By ultrasonic amplitude-depth analysis, 220
Processing method, effect of
On pasturization and nitrogen components of broiler litter and on nitrogen utilization by sheep, 750
Processing temperature and L-Lysine supplementation, effect of
On utilization of sunflower meal by the growing rat, 90
Producers and consumers of pork, beef and veal
Economic importance of antibiotics in feeds to, 1241
Progesterone and estradiol-17β, II. Effect of injections of
On serum LH, FSH and ovarian activity, 1105
Progesterone concentration of ovarian and uterine venous blood in mares,
Collection technique and, 275
Prolactin and thyrotropin in sheep
Somastostatin: Its influence on plasma levels of growth hormone, 911
Properties, chemical and physical
Of processed sorghum grain carbohydrates, 335
Prostaglandin $F_{2\alpha}$, effects of
On estrous cycle or corpus luteum in mares and gilts, 518
Protein, dietary
Lysine requirement of growing pigs at two levels of, 851
Protein in Red Danish cattle, total
Genetic analysis of the serum level of IgG_2 and, 392
Protein level, effect of dietary
On plasma and tissue free amino acid concentrations in nursing lambs, 789
Protein protected fat for ruminants
I. Digestion and performance in fattening steers, 691
II. Serum lipids and lipoproteins, 697
Protein supplementation, effect of maturity and
On voluntary intake and nutrient digestibility of Pangola digitgrass hays, 769
Puberty in beef heifers
I. The interrelationship between pituitary, hypothalamic and ovarian hormones, 1091
II. Effect of injections of progesterone and estradiol-17β on serum LH, FSH and ovarian activity, 1105
III. Induction of fertile estrus, 1110

R

Rabbit embryos, development of
After storage at 10 C, 900
Radioactivity and tissue residues, depletion patterns of
In beef cattle after the withdrawal of oral ^{14}C-Diethystilbestrol, 539
Radiocarbon, fate of
In beef steers implanted with ^{14}C-diethylstilbestrol, 550
Rams, semen characteristics of
Effects of methoxychlor and malathion on, 514
Rat, the growing
Effect of processing temperature and L-lysine supplementation on utilization of sunflower meal by, 90
Rations, beef finishing
Replacement value of triticale for corn and wheat in, 940
Rations, lamb fattening
Wood cellulose as an energy source in, 977
Rats
Utilization of alfalfa meal and alfalfa protein concentrate by, 500
Record system, development of a
For measuring swine breeding herd efficiency, 13
Regression model, a multiple
For net income estimates from 100-sow production units, 6

Renal response to vasopressin infusion
In vitamin A-deficient and normal ewes, 103
Reproductive physiology of the stallion. V.
Effect of frequency of ejaculation on seminal characteristics and spermatozoal output, 917
Research, animal nutrition
Recent developments in, in Eastern Europe, 1284
Riboflavin, Effects of 5, 6-dimethylbenzimidazole, adenine and
On ruminal vitamin B_{12} synthesis, 1199
Ronnel and activated carbon
Tissue residues, performance and ruminal and blood characteristics of steers fed, 743
Roughage, different levels of
Effect of high ambient temperature and low humidity on nutrient utilization and on some physiological responses in Awasi sheep fed, 320
Rumen microbial protein synthesis *in vitro*
Gas and volatile fatty acid production at different rates of, 374
Ruminants
Feed grade biuret as a protein replacement for. A review, 1150
Relationship between nitrogen balance, digested nitrogen and dry matter digestibility in, 366
Ruminants, protein protected fat for
I. Digestion and performance in fattening steers, 691
II. Serum lipids and lipoproteins, 697

S

Salmonellosis in animals and man
Relationships of antibiotics in animal feeds and, 1222
Salt requirements
Of lambs, 329
Selenium in reproductive diets, efficacy of supplemental
On sow and progeny serum and tissue selenium values, 624
Selenium, single intramuscular injections of
Effects of, at various levels to young swine, 844
Semen, concentrated
Freezing of boar spermatozoa: Fertilizing capacity with, and a new thawing procedure, 99
Seminal extenders, effect of
On equine fertility, 1136
Serum lipids and lipoproteins, II.
Protein protected fat for ruminants, 697
Serum LH, FSH and ovarian activity
II. Effect of injections of progesterone and estradiol-17β on, 1105
Serum luteinizing hormone, testosterone and androstenedione
In pubertal and prepubertal bulls after gonadotropin releasing hormone, 682
Sheep
Comparison of Pangolasgrass and water hyacinth silates as diets for, 968
Ensiled broiler litter and corn forage. II. Digestibility, nitrogen utilization and palatability by, 156
Digestion and utilization of formaldehyde treated alfalfa meal by, 945
Evaluation of ammonium lignin sulfonate as a non-protein nitrogen source for. . ., 1144
Somatostatin: Its influence on plasma levels of growth hormone, prolactin and thyrotropin in, 911
Wind-chill effect for cattle and, 161
Sheep, digestibility, rumen fluid and plasma metabolism of
Influence of whole-plant barley reconstituted with sodium hydroxide on, 351
Sheep, fed a protein-free urea containing purified diet
Suspected "B"-vitamin deficiency of, 1192
Sheep, nitrogen utilization by
Effect of processing method on pasturization and nitrogen components of boiler litter and on, 750
Silages, water hyacinth
Comparison of Pangolagrass and, as diets for sheep, 968
Sire effects for specific combining ability
In purebred and crossbred cattle, 230
Skeletal maturation of beef steers
Effect of currently used growth promotants upon, 1211
Sodium hydroxide, influence of whole-plant barley reconstituted with
On digestibility, rumen fluid and plasma metabolism of sheep, 351
Sodium hydroxide treatment on poplar bark
Effects of grinding and, 727
Somastostatin
Its influence on plasma levels of growth, prolactin and thyrotropin in sheep, 911
Sorghum grain carbohydrates, processed
Chemical and physical properties of, 335
Sorghum grain, micronized
I. Influence on feedlot performance of cattle, 924
II. Influence on *in vitro* digestibility, *in vitro* gas production and gelatinization, 931
III. Energetic efficiency for feedlot cattle, 936
Sow and progeny serum and tissue selenium values
Efficacy of supplemental selenium in reproductive diets on, 624
Sow, the lactating
Threonine requirement of, 892
Sows, phosphorus requirements of
During gestation and lactation, 660
Sows, pregnancy in
Early diagnosis of, by ultrasonic amplitude-depth analysis, 220
Soybean meal and urea, supplements containing
Comparison of, fed with whole or ground shelled corn to beef cattle, 1
Space and docking effects on swine performance and behavior
Magnesium supplementation, 1027
Spermatozoa frozen in plastic straws, bull
Effect of glycerol equilibration time and thawing rate upon acrosomal maintenance and motility of, 302
Spermatozoa, porcine
Alteration of phospholipids in, during *in vivo* uterus and oviduct incubation, 269

Spermatozoan respiration and motility, porcine
In the presence of bovine follicular fluid, 96
Stallion, reproductive physiology of the
V. Effect of frequency of ejaculation on seminal characteristics and spermatozoal output, 917
Steam pelleting, influence of
And dietary calcium level on the utilization of phosphorus by the pig, 857
Steers
Metabolic fate of diethylstilbestrol implanted in the ear of, 530
Protein protected fat for ruminants. I. Digestion and performance in fattening, 691
Steers, beef
Effect of currently-used growth promotants upon skeletal maturation of, 1211
Steers fed ronnel and activated carbon
Tissue residues, performance and ruminal and blood characteristics of, 743
Steers, growing-finishing beef
Utilization of phosphorus from different supplements for, 760
Steers, growth and plasma amino acids of
Fed different nitrogen sources at restricted intake, 714
Steers, straightbred and crossbred
Tenderness studies in, 468
Sulfate, effect of high dietary molybdenum and
On plasma copper clearance and tissue minerals in growing swine, 509
Sunflower meal, utilization of
Effect of processing temperature and L-lysine supplementation on, by the growing rat, 90
Swine
Comparison of a lean and fat line of, for muscle processing characteristics, 598
Utilization of alfalfa protein concentrate by, 885
Variation of plasma creatine phosphokinase activity in, 75
Swine, a nutrient source for
Condensed fermented corn solubles with germ meal and bran (DSLC) as,. I. Amino acid limitation, 242
II. Amino acid subsitution, 247
Swine, *ascaris, trichuris* and *metastrongylus* infection in
Anthelmintic activity of levamisole against, 838
Swine breeding herd efficiency
Development of a record system for measuring, 13
Swine, confinement reared
Influence of exercise on performance and carcass parameters of, 457
Swine, copper uptake by
Effects of source on, 880
Swine differing in muscularity
Cellular growth of skeletal muscle in, 476
Swine, drylot finishing systems for
An evaluation of enclosed confinement and, 214
Swine, estrous cycle length in
Effect of surgical separation of uterus and ovaries on, 905
Swine, growing
Effect of high dietary molybdenum and sulfate on plasma copper clearance and tissue minerals in, 509
Influence of diet on passage rate and apparent digestibility by, 486
Swine, growing-finishing
Chemically preserved high-moisture corns in diets for, 1063
Swine growth and feed utilization
Genetic and environmental effects and interactions in, 53
Swine, maternal heterosis in:
Reproductive performance and dam productivity, 29
Swine performance
Effect of dietary antimicrobials during early growth and on subsequent, 655
Swine performance and behavior
Magnesium supplementation space and docking effects on. 1027
Swine, selection for ovulation rate in:
Population, procedures and ovulation response, 61
Swine, six breeds of
Antemortem detection of muscle quality in, 444
Swine, young
Effects of single intramuscular injections of selenium at various levels to, 844
Energy values of corn and oats for, 1052
Symposium, an introduction to a
Animal science research in Eastern Europe, 1281
Systems analysis of sources of genetic and environmental variation in efficiency of beef production:
Mating plans, 433
Heterosis and complementarity, 421
Cow size and herd management, 409

T

Temperature, and low humidity, effect of high ambient
On nutrient utilization and on some physiological responses in Awasi sheep fed different levels of roughage, 313
Tenderness studies
In straightbred and crossbred steers, 468
Thawing procedure, a new
Freezing of boar spermatozoa: Fertilizing capacity with concentrated semen and, 99
Threonine requirement
Of the lactating sow, 892
Thyroid hormone secretion rates
In growing and mature goats, 1130
Thyrotropin in sheep
Somatostatin: Its influence on plasma levels of growth hormone, prolactin and, 911
Tissue lipids of finishing cattle
Growth, blood parameters and, fed a formaldehyde treated casein-safflower oil complex, 358
Tissue minerals in growing swine
Effect of high dietary molybdenum and sulfate on plasma copper clearance and, 509
Tissue residues
Performance and ruminal and blood characteristics of steers fed ronnel and activated carbon, 743
Tissues of lambs
Cellular changes in the, during fetal growth, 783

Tissue selenium values
Efficacy of supplemental selenium in reproductive diets on sow and progeny serum and, 624
Traits of Charolais bulls, puberal
Growth and feed efficiency and their relationship to, 288
Triticale, replacement value of
For corn and wheat in beef finishing rations, 940
Trout, domesticated rainbow
Genetics of reproduction in, 19
Tryptophan additions, glutamic acid and
To a low protein pig starter, 871
Tryptophan requirements
Of 5- to 15-kg pigs with semipractical pig starters, 875
Tumorigenic effects of chemical carcinogens and hormones
Comparison of the, 1263
Twinning in cattle, 803
Tylosin and chlortetracycline for the prevention of liver abscesses
Improved weight gains and feed efficiency in feedlot cattle, 207

U

Ultrasonic amplitude-depth analysis
Early diagnosis of pregnancy in sows by, 220
Urea, protein-free
Suspected "B"-vitamin deficiency of sheep fed a, containing purified diet, 1192
Uterus and ovaries, effect of surgical separation of
On estrous cycle length in swine, 905

V

Vasopressin infusion, renal response to
In vitamin A-deficient and normal ewes, 103
Vitamin A-deficient and normal ewes
Renal response to vasopressin infusion in, 103
Vitamin B_{12} synthesis, ruminal
Effects of 5,6-dimethylbenzimidazole, adenine and riboflavin on, 1199
Vitamin E stability
In corn and mixed feed, 495

W

Water temperature, effect of drinking
On beef cattle performance, 223
Weaning and age at weaning, effect of
On baby pig performance, 1077
Wildlife, as a protein source
Potential of
The place of game animals in agriculture, 1016
Wind-chill effect
For cattle and sheep, 161
Wood cellulose
As an energy source in lamb fattening rations, 977

Z

Zero tolerance concept
As it relates to hormonal residues in animal products, 1258
Zinc metabolic adaptations in calves
Fed a high but nontoxic zinc level for varying time periods, 132

AUTHOR INDEX FOR VOLUME 40, 1975

Page numbers of abstracts for the National and Sectional Meetings are identified by an asterisk.

A

Abaza, M. A., 366
Aberle, E. D., 476
Abler, W. A., 186*
Ablin, R. C., 200*
Abraham, H. C., 177*
Aimone, Jerry, 191*
Albright, J. Kelly, 182*
Albright, J. L., 1027
Almquist, J. O., 288, 302
Alsmeyer, W. L., 6
Ames, D. R., 161
Ammerman, C. B., 168*, 195*, 509
Amos, H. E., 90, 195*
Anderson, Gary B., 900
Anderson, J. M., 190*
Anderson, R. R., 1130
Anthony, W. B., 189*, 190*, 192*, 199*
Arthaud, V. H., 1039
Arthur, D., 864
Aschbacher, P. W., 530, 550
Ashmore, R. C., 783
Asplund, J. M., 138

B

Babatunde, G. M., 632
Back, D. G., 1136
Bacon, C. W., 181*
Bagnall, L. O., 968
Baker, D. H., 242, 247, 660, 851
Baker, F. S., Jr., 191*
Baker, J. P., 1086
Baldwin, J. A., 968
Baldwin, R. Lee, 186*, 982
Ball, L., 665
Barb, C. Richard, 604
Barker, K. A., 288
Baribo, L. E., 977
Barr, G. R., 590
Barrick, E. R., 194*
Barth, Karl M., 183*, 204*
Bayley, H. S., 857
Bazer, Fuller W., 169*, 170*
Beardsley, D. W., 181*
Beermann, D. H., 75
Beeson, W. M., 1214
Beitz. D. C., 957
Bell, F. F., 202*
Bell, M. C., 178*
Bellows, R. A., 1119
Bercovitz, A. B., 167*
Bereskin, B., 53
Bergen, Werner G., 789
Berger, P. Jeffrey, 38
Bertsch, S. P., 178*
Beverly, J. R., 188*
Bhattacharya, A. N., 320
Bidner, T. D., 176*, 468
Bigger, G. W., 1199
Bigger, T. C., 182*
Billon, W. E., 168*
Bing, R. F., 207
Black, D. L., 671
Blincoe, Clifton, 342
Boling, James A., 177*, 192*, 193*, 194*, 567, 613, 714, 775, 972
Bolsen, Keith K., 306
Bolt, D. J., 687
Bond, T. E., 223
Boston, Andrew C., 172*, 176*
Bowman, G. H., 864
Boyett, G. Q., 306, 351
Bradford, G. E., 1058
Bradley, N. W., 192*, 193*, 194*, 567, 714, 775
Bramble, W. J., 573
Brannen, L. R., 168*
Breuer, D. J., 188*
Broadway, J. L., 188*
Brown, C. J., 173*, 202*
Brown, Herbert, 207
Brown, V. L., 190*
Bryan, J. M., 183*
Buckner, R. C., 972
Buckland, D. E., 186*
Buitrago, J., 640, 648
Bunch, Thomas D., 1009
Burdick, D., 90
Burns, W. C., 173*, 174*, 188*, 193*, 230
Burris, W. R., 714
Burrus, P. B., 972
Burwash, L., 1136
Bush, L. P., 972
Byrd, W. P., 168*

C

Calderon, F. L., 179*
Campbell, D. R., 180*
Carle, C. J., 180*
Carter, R. C., 181*, 192*
Cartwright, T. C., 170*, 409, 421, 433
Carver, L. A., 183*
Cassens, R. G., 75
Caswell, L. F., 200*, 750
Chamberlain, Charles C., 203*, 204*
Chamberlain, G. L., 203*
Chapman, A. B., 70
Cheeke, P. R., 500, 885
Chen, C. P., 176*
Chen, M. L., 176*, 940
Chen, T. T., 170*
Chenault, J. R., 184*
Chittenden, L. W., 199*
Christensen, D. S., 1119
Christensen, K., 392
Christian, L. L., 598
Ciordia, H., 190*
Clapp, K. L., 177*
Clawson, A. J., 6, 640, 648
Clegg, Eric D., 269
Clemens, E. T., 126
Cline, J. H., 624
Cline, T. R., 486
Coleman, S. W., 181*
Cooley, C. O., 207
Cooper, J. R., 189*
Combs, G. E., Jr., 167*, 193*, 509
Connell, J. T., 183*
Conrad, J. H., 486, 1027
Convey, E. M., 682
Cordray, J. C., 167*
Cornelius, Steven G., 242, 247
Cornwell, J. C., 167*
Couch, B. Y., 977
Creswell, D. C., 167*, 179*
Cripe, W. S., 195*
Crockett, J. R., 173*, 230, 826
Croka, D. C., 924, 931, 936
Cromwell, G. L., 179*
Crookshank, H. R., 189*, 190*
Cross, H. R., 177*
Crouse, John D., 463, 834
Croyle, R. C., 1144

Cuitun, L. L., 691, 697
Cullison, A. E., 201*
Cunningham, A. C., 201*
Cunningham, J. P., Jr., 199*
Cunningham, P. J., 61, 880

D

Daniels, F. L., 539, 550
Danielson, David M., 621
Darroch, J. G., 169*
Davey, R. J., 53
Davis, Betty J., 604
Davis, K. A., 167*, 178*
Davis, S. L., 911
Davidson, T. P., 1211
Day, Billy N., 96, 261
DeGoey, L. W., 179*, 1045, 1052
Deif, H. I., 366
Denham, A., 1110
Depew, Clinton G., 173*
Dickerson, G. E., 397
Dickey, J. R., 168*, 187*
Diehl, J. S., 844
Diggs, B. G., 180*
Dikeman, Michael E., 451, 463
Dinius, D. A., 358, 945
Dohy, Janos, 1300
Douglas, R. H., 518
Dryden, F. D., 691, 697
Dutt, R. H., 186*, 188*, 189*
Dyer, I. A., 977
Dziuk, Phillip J., 220, 282

E

Eason, J. E., 193*
Easter, R. A., 851
Edmeades, D., 495
Edmondson, L. F., 358
Edwards, R. L., 168*, 191*
Eisen, E. J., 816
el-Faham, R. H., 366
Ellicott, A. R., 168*, 187*
Elliot, J. M., 1199
Ellis, G. F., Jr., 174*
Ellis, W. C., 177*, 199*
El Serafy, A. M., 727, 734
el-Shazly, K., 366
Ely, D. G., 202*, 567
Ely, L. O., 186*
Entringer, R. P., 486
Erb, Ralph E., 261
Ernst, J. V., 190*
Essig, H. W., 169*, 178*, 192*
Estergreen, V. L., 251
Evans, A. D., 743
Ewan, R. C., 1045, 1052, 1070, 1077, 1081

F

Farr, F. M., 189*
Ferguson, D. L., 838
Fetuga, B. L., 632
Fick, K. R., 168*
Fields, M. J., 184*, 188*
Finland, Maxwell, 1222
First, N. L., 905
Fitzhugh, H. A., Jr., 409, 421, 433
Fleeger, J. L., 188*
Flores, Z., 640, 648
Fonnesbeck, Paul V., 1150
Fontenot, J. P., 144, 156, 180*, 181*, 192*, 198*, 200*, 750, 760, 1263
Foote, R. H., 900
Foote, Warren C., 1009
Foree, J. B., 189*
Forshaw, R. P., 495
Foutch, H. W., 182*
Franke, D. E., 169*, 173*, 174*, 175*, 188*, 193*, 769
Fribourg, H. A., 183*
Frye, T. M., 198*
Furman, J. W., 665

G

Gaines, J. A., 203*
Gall, G. A. E., 19
Galo, A., 242, 247
Garrett, W. N., 783
Garrigus, R. R., 182*
Garverick, H. A., 261
Gaskins, C. T., 169*, 174*, 177*
Gass, George H., 1261
Gay, N., 192*, 194*
Gebhardt, B., 170*
Gentry, R. P., 132, 720
Gerrits, Roger, 1255
Gharib, F. H., 727, 734
Gil-Beroes, R. A., 182*
Gilliam, Henry C., Jr., 1241
Ginther, O. J., 275, 518
Givens, Robert L., 223
Glimp, A. A., 397
Godke, R. A., 167*
Goerke, T. P., 186*, 189*
Gomez, G., 640, 648
Gómez, J., 183*
Gonzalez-Padilla, E., 1091, 1105, 1110
Gonzalez, Vidal, Jr., 169*
Goodrich, R. D., 727, 734
Gould, M. B., 585
Green, G. G., 203*
Grimes, G. A., 214
Grotjan, H. Edward, Jr., 96
Grueter, H. P., 207
Guenther, J. J., 176*

H

Hackett, A. J., 671
Hafs, H. D., 682
Hagan, Fay, 180*
Hagsten, Ib, 329, 1205
Hale, O. M., 192*
Hale, W. H., 691, 697
Hall, G. E., 1063
Hallford, D. M., 187*
Hammell, David L., 179*, 573
Hansard, Sam L., 178*, 184*, 198*
Hansard, S. L., II., 195*
Hansel, William, 671
Harmeyer, J. H., 1192
Harmon, B. G., 242, 247, 660
Harmon, B. W., 144, 156
Harness, J. R., 1130
Harrington, R. B., 1027
Harris, Lorin E., 1150
Harris, R. R., 190*
Harvey, R. W., 194*
Harvey, W. R., 174*
Harvey, Walter R., 38, 383
Hatfield, E. E., 1063
Haugebak, C. D., 138
Hawk, H. W., 687
Hays, V. W., 179*, 1081, 1236
Hedrick, H. B., 138
Heishman, J. A., 187*
Hellwig, R. E., 1034
Hembry, F. G., 1, 182*
Henricks, D. M., 168*
Hentges, J. F., 188*, 968
Herschberger, T. V., 1144
Hesby, Howard, 203*
Hetzer, H. O., 53
Hickman, C. G., 590
Hill, G. M., 193*
Hill, L. D., 1063
Hill, R. C., 199*
Hirschinger, C. W., 75
Hodgson, D., 1058
Hoff, B. J., 182*
Holler, H., 1192
Holliday, E. R., 187*
Holloway, J. W., 114, 190*
Holmes, W., 706
Holtan, Donald W., 251
Horton, Glyn M. J., 706
Huffman, D. L., 167*, 170*, 178*
Humes, P. E., 174*
Humburg, J. M., 185*
Hupp, H. D., 192*
Hutton, J. B., 199*

I

Icaza, Emilio A., 172*, 176*, 468
Inskeep, E. K., 187*
Insley, L. W., 161

J

Jackson, Charlie, Jr., 514
Jackson, T. C., Jr., 199*

Jacobs, B. F., 199*
Jamison, M. G., 175*
Jenkins, T. G., 170*
Jensen, A. H., 242, 247, 660, 1063
Jensen, P. Thode, 392
Jilek, Anthony F., 230
Johnson, B. H., 168*
Johnson, L. A., 99, 108
Johnson, R. K., 29, 171*, 175*, 183*
Johnson, R. R., 126
Johnson, Ronald R., 204*
Johnson, W. M., 176*
Johnson, Zelpha, 173*, 175*, 180*
Johnston, David M., 177*, 613
Jones, D. J., 193*
Jones, Rick D., 178*
Jones, R. G., 1027
Jordan, R. M., 78, 86

K

Katz, R. S., 851
Kauffman, R. G., 235
Kearl, Leonard C., 1150
Keller, L. H., 202*
Kemp, James D., 613
Kennick, W. H., 1211
Kimoto, W., 358
Kirk, W. G., 826
Kirkpatrick, R. L., 185*, 186*
Klopfenstein, Terry, 523
Knight, J. W., 169*
Koes, R. M., 313
Koger, Marvin, 171*, 173*, 174*, 230, 826
Kohler, G. O., 945
Kolbye, C., Jr., 1258
Koon, J. L., 193*
Koong, Ling-Jung, 982
Kotula, A. W., 834
Kozak, A. S., 539, 550
Kraeling, Robert R., 604
Kratz, J. L., 175*
Kratzer, D. D., 193*, 573
Kreider, J. L., 167*
Krider, J. L., 1027
Kropf, D. H., 451
Krug, J. L., 187*

L

LaSalle, Timothy J., 48
Lassiter, J. W., 201*
Lazarus, C. R., 176*
Lazenby, L. R., 184*
LeFever, D., 1110
Lehmann, Richard P., 1278
Leibbrandt, V. D., 1070, 1077, 1081
Leman, A. D., 13
Leonard, T. M., 1086
Leverette, E. A., 177*
Lewis, A. J., 892
Libal, George W., 655
Lin, C. T., 660
Lindahl, I. L., 220, 514
Linger, E. A., 187*
Linnerud, A. C., 6, 194*
Lippke, H., 199*
Lofgreen, G. P., 223
Long, C. R., 170*, 409, 421, 433
Long, R. A., 235
Long, T. A., 1144
Lovell, D. R., 193*
Lowrey, R. S., 201*
Luckett, R. L., 176*, 468
Lun, A., 495
Lusby, W. R., 834
Lyke, G., 198*
Lyke, W. A., 198*
Lynch, P. B., 1063
Lyon, C. K., 945

M

Madsen, F. C., 198*
Mahan, D. C., 624, 844
Malven, P. V., 671
Mandigo, R. W., 457, 1039
Maner, J. H., 179*, 640, 648
Manson, A. R., 6
Marchello, J. A., 691, 697
Marlowe, Thomas J., 173*
Marple, D. N., 75, 170*, 184*, 185*
Marten, G. C., 86
Martin, C. A., Jr., 169*
Martin, F. G., 175*
Martin, J. Rod, 1241
Martin, P. A., 220
Martin, Susan K., 1185
Martin, Woodrow L., 169*, 178*
Mason, Tim R., 201*
Mather, Edward C., 261
Maxwell, Charles V., 178*, 183*
Mayer, Dennis T., 96
Meiske, J. C., 727, 734
Mejia, O., 640
Melton, Curtis C., 451
Meyerhoeffer, D. C., 187*
Miller, James K., 184*, 185*, 198*
Miller, S. M., 168*
Miller, W. J., 132, 720
Mirarchi, R. E., 185*
Mitchell, G. E., Jr., 103, 198*, 199*
Moin, Saidi, 174*
Mongkonpunya, K., 682
Moody, William G., 177*, 613
Moody, W. R., 194*
Moore, J. E., 769
Moore, R. L., 192*
Morris, James G., 982
Morrison, S. R., 223
Moser, B. D., 457, 880
Mossman, Archie S., 993
Moustafa, Laila A., 174*
Mowat, David N., 351
Moxon, A. L., 624, 844
Mueller, A. G., 13
Murphree, R. L., 189*
Myer, R. O., 500, 885
Myers, V. S., 78

Mc

McAskill, J. W., 207
McCampbell, H. C., 201*
McClaugherty, F. S., 181*
McClung, M. R., 187*
McClure, W. H., 192*, 200*
McComb, J. L., 182*
McCormick, W. C., 952, 1034
McFate, K. L., 214
McGuire, J. A., 184*
McLaren, J. B., 183*, 202*
McNeill, J. W., 335

N

Nachreiner, R. F., 170*, 184*, 185*
Naga, M. A., 366, 374, 1192
Nagai, Jiro, 590
Nandi, S., 1263
Neathery, M. W., 132, 720
Nelson, L. D., 1124
Nett, Terry M., 251
Newton, G. L., 198*
Nishimuta, J. F., 182*
Niswender, G. D., 1091, 1105
Noland, P. R., 175*, 180*
Noonan, John J., 621
North, Warren A., 186*
Norton, H. W., 444
Notter, David R., 383
Novakowski, N. S., 1016

O

Oblinger, J. L., 176*
O'Conner, Rod, 203*
Olds, D., 187*
Oliver, W. M., 190*
Ololade, B. G., 351
Olsen, F. J., 182*
Oltjen, R. R., 358, 539, 550
Omtvedt, I. T., 29, 171*, 183*
Ono, Katsuto, 604
Outhouse, J. B., 329
Overstreet, J. W., 170*
Oxender, W. D., 682
Oyenuga, V. A., 632

P

Palmer, A. Z., 167*, 176*

Pate, F. M., 181*
Peacock, Fentress M., 171*, 826
Pearson, J., 203*
Pendlum, L. C., 194*, 972
Peo, E. R., Jr., 457, 880
Perry, T. W., 329, 1205, 1214
Peters, W. H., 53
Peterson, D. W., 1058
Peterson, R. C., 1214
Pettigrew, J. E., 247
Pfander, W. H., 313
Phillips, Ralph W., 1281
Pickett, B. W., 917, 1124, 1136
Pisitkasem, Suratin, 180*
Piess, C. D., Jr., 198*
Plumlee, M. P., 486, 1027
Plummer, W. E., 168*
Pope, C. E., 187*
Porter, L. B., 200*
Porter, J. K., 181*
Pos, J., 495, 857, 864
Post, Amy J., 182*
Pothoven, M. A., 957
Potter, Emerson L., 789
Potter, Gary D., 335
Powell, S. E., 476
Pund, W. A., 169*
Purohit, R. C., 185*
Pursel, V. G., 99, 108

Q

Quintero, S. O., 183*

R

Ralston, A. T., 1211
Ramsey, C. Boyd, 169*, 177*, 202*
Randel, R. D., 1119
Rao, D. R., 182*, 940
Rathmacher, R. P., 207
Rattray, P. V., 199*, 783
Redd, T. L., 567
Reddy, C. S., 182*
Reddy, S. G., 176*, 940
Reid, R. L., 182*
Reinhardt, C. A., 203*
Reynolds, P. J., 514, 945
Reynolds, W. L., 1
Rickard, T. R., 1199
Riggs, J. K., 169*, 335, 561
Riley, Jack G., 306
Riquelme, Ernesto, 977
Ritter, R. J., III, 103
Robb, J., 1058
Robbins, J. D., 181*
Roberts, R. M., 170*
Robinson, D. W., 783, 1058
Rodeffer, H. E., 13
Rodriguez, T. R., 188*
Rogers, Robert W., 169*, 178*, 180*, 190*
Rogovin, S. P., 972
Rooney, L. W., 335
Rosas, H., 183*
Ruelke, O. C., 769
Ruiz, R., 1110
Rumsey, T. S., 530, 539, 550
Rust, R. E., 598
Rutledge, J. J., 70, 803

S

Saatman, R. R., 671
Sanwal, Mohan C., 184*
Sauer, N. G., 168*
Scanlon, P. F., 185*, 186*
Scarth, R. D., 172*
Schaefer, D. M., 235
Schake, L. M., 561
Schaller, K., 1192
Schechter, R. J., 671
Schelling, G. T., 103, 198*, 199*
Schilling, P. E., 174*
Schmidt, G. R., 444
Schmitt, Dennis, 261
Schneider, H. J., Jr., 187*
Schreck, R. E., 185*
Seerley, R. W., 90
Seidel, G. E., Jr., 665, 917, 1124
Sewell, J. I., 202*
Sharp, R. N., 175*, 180*
Sherrod, L. B., 195*
Sherwood, D. H., 201*
Shirley, R. L., 968
Short, R. E., 1119
Sidwell, G. M., 514
Sihombing, D. T. H., 179*
Sikes, J. D., 261
Simmons, K. R., 671
Simpson, C. F., 195*
Sinclair, C. L., 1027
Singh, Bhagwan, 188*
Skelley, G. C., 176*, 191*
Skoch, S. A., 199*
Smalley, H. E., 189*, 190*
Smith, L. A., 192*
Smith, Lewis, 1267
Smith, M., 203*
Smith, Robert C., 189*
Smithson, L. J., 192*
Snider, D. R., 269
Snyder, Merrill J., 1238
Solman, V. E. F., 1016
Sorensen, A. M., Jr., 188*
Sowers, J. E., 179*
Spalding, G. E., 185*
Speer, V. C., 892, 1070, 1077, 1081
Spencer, R. R., 195*
Spillett, J. Juan, 1009
Sprouse, W. D., 214
Spurrell, Francis A., 78
Squires, Edward L., 275
Stabel, Max, 169*
Stahly, Tim, 880
Stake, P. E., 132, 720
Standish, J. F., 509
Stanislaw, C. M., 193*
Steel, Ellen, 190*
Stephens, D. F., 114
Stewart, Dennis F., 177*, 613
Stewart, T. B., 192*
Stewart, T. S., 173*
Stiffler, D. M., 175*
Stormshak, F., 1185
Stricker, Connie M., 189*
Stryker, Jane L., 282
Stuart, R. L., 199*
Stuedemann, J. A., 190*
Stupnicki, Romuald, 1307
Sullivan, John J., 917
Summers, C. B., 195*
Swiger, L. A., 383

T

Teer, James G., 1000
Templeton, W. C., Jr., 193*
Terrill, Clair E., 1020
Thacker, E. J., 530
Thatcher, W. W., 184*, 188*, 193*
Theurer, Brent, 691
Thomas, D. L., 171*
Thomas, R. C., 170*
Thomson, R. G., 857, 864
Thornton, J. H., 957
Thrift, F. A., 189*, 202*
Todorov, Nicolay A., 1284
Tonroy, B. R., 1214
Tookey, H. L., 972
Topel, D. G., 598
Torres, Ciro A. A., 905
Totsch, James P., 220
Totusek, Robert, 114, 194*
Tribble, L. F., 177*
Tsou, R. C., 189*
Tucker, H. A., 682
Tucker, R. E., 103, 198*, 199*
Tuma, H. J., 451
Turman, E. J., 187*
Turner, J. W., 468
Turner, Thomas B., 204*

U

Ulberg, L. C., 168*
Umunna, N. N., 523
Unfred, David, 200*
Underwood, L., 1027
Uwayjan, M., 320
Utley, P. R., 952, 1034

V

Van Dyke, N. J., 176*
Van Ess, M. E., 235
VanMeter, Jim, 172*
Varner, Larry W., 963
Ventura, M., 769

Veum, T. L., 214
Voss, J. L., 1136

W

Wagner, D. G., 191*, 924, 931, 936
Wahlstrom, Richard C., 655
Wallace, H. D., 169*, 179*, 509
Wallace, H. L., 167*
Walters, L. E., 171*, 175*, 183*
Warnick, A. C., 188*
Washam, R. D., 179*
Watson, N. O., 201*
Wax, J. E., 444
Webb, K. E., Jr., 144, 156, 180*, 198*, 200*, 750, 760, 1267
Webster, H. W., III, 194*
Weiss, G. M., 457, 1039
Welch, J. A., 187*
Wells, M. E., 188*
West, R. L., 167*, 176*
Wettemann, R. P., 183*, 187*
Wheaton, J. E., 1185
Whelan, J. B., 186*
White, J. M., 48, 175*
White, R. G., 838
White, T. W., 1, 182*
Whiteman, J. V., 114, 171*, 585
Whitley, R., 193*
Wiggin, H. B., 302
Wilcox, C. J., 175*, 184*
Wilkinson, S. R., 190*
Willard, Judy, 1086
Williams, E. E., 743
Wilson, D. G., 598
Wise, M. B., 181*, 760
Wilson, Robert, 180*
Wiltbank, J. N., 1091, 1105, 1110
Wolfe, Shirley, 486
Wong, Y. K., 174*
Woods, Walter W., 523, 963, 1256
Wordinger, R. J., 187*
Worley, E. E., 172*
Wright, Jack, 194*
Wyatt, R. D., 126

Y

Yates, S. G., 972
Yoakum, J. D., 985
Yoho, Bradford, 78
York, J. O., 180*
Young, A. W., 775
Young, L. D., 171*
Young, L. G., 495

Z

Zimmerman, Dean R., 871, 875, 1070, 1077
Zimmerman, Dwane R., 61
Zinn, Dale W., 169*
Zoubek, G. L., 880